Getting Started

HP Compaq Notebook Series

Document Part Number: 367187-002

May 2006

This guide explains how to set up your hardware and software and begin using the computer in Microsoft Windows.

Enhanced for Accessibility

© Copyright 2005, 2006 Hewlett-Packard Development Company, L.P.

Microsoft and Windows are U.S. registered trademarks of Microsoft Corporation. Bluetooth is a trademark owned by its proprietor and used by Hewlett-Packard Company under license.

The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Getting Started
HP Compaq Notebook Series
Second Edition: May 2006
First Edition: March 2005
Document Part Number: 367187-002

Contents

1 First-time setup

Identify required hardware 1–1
Set up the computer 1–3
Step 1: Insert the battery pack 1–4
Step 2: Connect the computer to external power. . . . 1–5
Step 3: Turn on the computer 1–6
Step 4: Set up the software 1–8
Step 5: Create recovery discs (recommended) 1–9

2 Next steps

Install additional hardware and software 2–1
Identify and install hardware 2–1
Locate or install software 2–2
Protect the computer 2–3
Protect the computer from viruses. 2–3
Protect your system files 2–3
Protect your privacy. 2–4
Protect the computer from power surges 2–4
Use the computer safely 2–5
Connect to a computer network 2–6
Update your software 2–7
Locate the user guides 2–7
Turn off the computer correctly 2–8

3 Troubleshooting

Troubleshooting resources 3–1
Quick troubleshooting 3–2
The computer is unable to start up. 3–2
The computer screen is blank 3–3
Software is functioning abnormally 3–4
The computer is turned on but not responding 3–4
The computer is unusually warm. 3–5
An external device is not working. 3–6
The home wireless network connection is not working 3–6
Help and Support Center 3–7
Customer Care 3–7
Prepare to contact Customer Care 3–8
Contact Customer Care by e-mail or telephone. 3–8

A Notebook Tour

Top components A–2
Keys A–3
Pointing devices A–4
Fingerprint reader. A–5
Wireless antennae. A–6
Front components. A–7
Rear components A–7
Left-side components A–8
Right-side components. A–8
Bottom components A–9

B Connect to the Internet from your home

Choose an ISP B–1
Use the New Connection Wizard B–2
Choose the type of Internet connection B–3

C Backup and recovery

Safeguard your data C–1
Back up the system. C–2
Back up specific files or folders C–2
Back up the entire system C–3
Back up modifications made to the system C–5
Schedule backups C–6
Recover the system C–7
Create recovery discs (recommended) C–8
Perform a recovery C–10

D Specifications

Operating environment. D–1
Rated input power D–2

Index

1

First-time setup

Identify required hardware

To set up the computer for the first time, you will need the computer, HP Smart AC adapter, power cord, and the battery pack.

Components included with the computer may vary by region and by model.

Components			
❶	HP Smart AC Adapter	❹	Modem cable (optional for setup)
❷	Power cord	❺	Modem adapter (optional for setup)
❸	Battery pack		

Use only the included AC adapter or one approved for use with this computer.

Unless you use dial-up networking, the modem cable is optional for setup.

Set up the computer

To set up the computer, you will

1. Insert the battery pack into the computer.
2. Connect the computer to external power.

   ✎ The battery pack begins to charge.

3. Turn on the computer.
4. Set up the software.
5. Create recovery discs (recommended).

   ✎ Refer to Appendix C, “Backup and recovery,” for instructions.

△ **CAUTION:** To prevent file corruption and ensure that the correct drivers are installed:

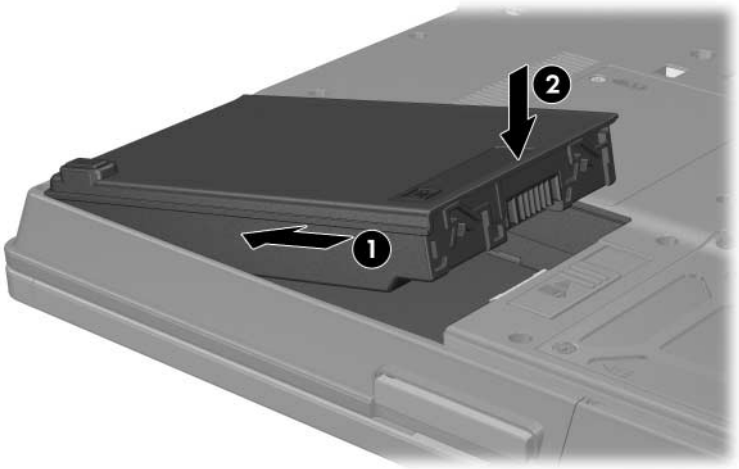
- Do not set up the computer for the first time while the computer is docked in an optional docking device.
- During the hardware and software setup procedures:
  - Do not unplug the computer from external power.
  - Do not shut down the computer or initiate standby or hibernation.

Step 1: Insert the battery pack

To insert the battery pack:

Battery packs vary by model.

1. Turn the computer upside down on a flat surface, with the battery bay toward you.
2. Slide the battery pack ❶ into the battery bay until it is seated.
3. Press the battery pack ❷ into the computer until it clicks into place.

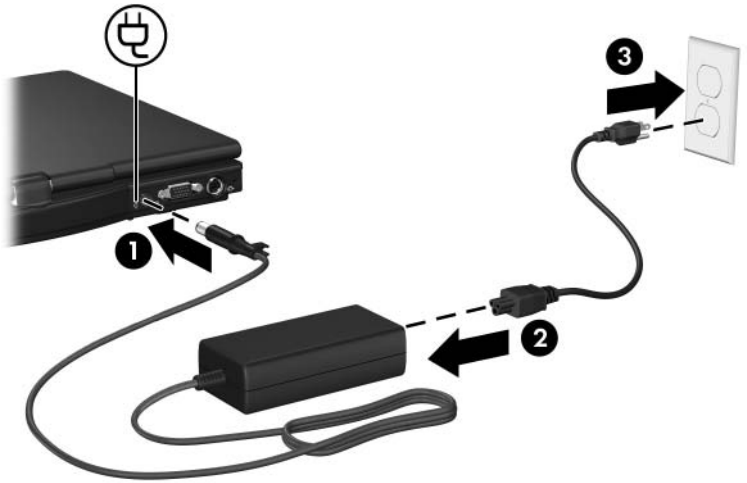


Step 2: Connect the computer to external power

Power cords and AC outlets vary in appearance by region and country.

To connect the computer to external AC power:

1. Plug the AC adapter into the power connector ❶ on the computer.
2. Plug the power cord into the AC adapter ❷.
3. Plug the other end of the power cord into an AC outlet ❸.



When the computer receives AC power, the battery pack begins to charge and the battery light (on the front of the computer) is turned on. When the battery pack is fully charged, the battery light is turned off.

Leave the computer connected to external power until the battery pack is fully charged and the battery light is turned off.

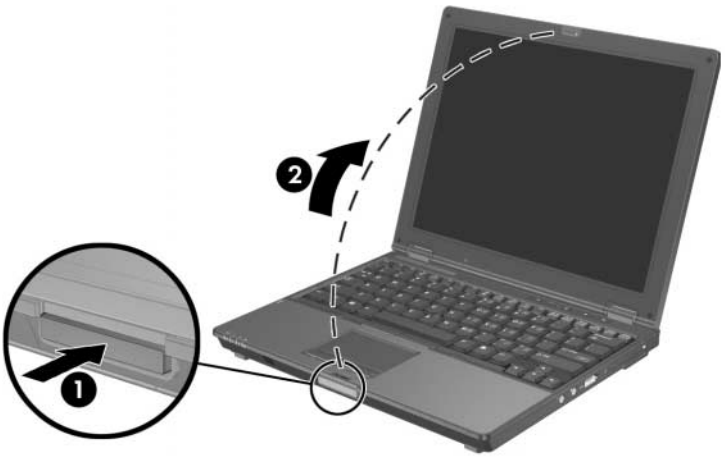
A partially charged new battery pack can run the computer after software setup is complete, but battery charge displays will not be accurate until the new battery pack has been fully charged.

Power cords and electrical outlets vary in appearance by region and country.

Step 3: Turn on the computer

To open the computer:

1. Press the display release button ❶ to open the display.
2. Raise the display ❷.



3. Slide the power switch ❶ toward the front of the computer.

   The power/standby light ❷ is turned on, and you are prompted to begin software setup.

The power/standby light is visible whether the computer is open or closed.

Step 4: Set up the software

After the computer is turned on, it will go through a brief software setup. Follow the on-screen instructions to set up the software. Note the following:

- After you respond to the setup prompt, you must complete the entire setup process without interruption. Setup time varies.
- During software setup, the computer may pause periodically for several minutes. These normal pauses are indicated by an hourglass icon.

CAUTION: If you are prompted to select an operating system language before the **Welcome to Windows** page is displayed, choose carefully. On some models, the languages that you do not choose are deleted from the system and cannot be restored during software setup.

To register the operating system and the computer, you must be connected to the Internet. For more information about connecting to the Internet, refer to Appendix B, "Connect to the Internet from your home," in this guide. If you do not register during software setup, you can do so at any time after software setup is complete

Step 5: Create recovery discs (recommended)

After setting up the computer for the first time, you can create a set of recovery discs of your full factory image using HP Backup and Recovery Manager. The recovery discs are used to start up (boot) the computer and restore the operating system and software applications to factory settings in case of system failure or instability.

Refer to Appendix C, “Backup and recovery,” for detailed instructions.

2

Next steps

Install additional hardware and software

Identify and install hardware

To see a list of hardware installed on the computer:

1. Select **Start > My Computer**.
2. In the left pane of the Systems Tasks window, select **View system information**.
3. Select **Hardware tab > Device Manager**.

You can also add hardware or modify your device configurations using Device Manager.

To install additional hardware, such as an optional printer, follow the instructions provided by the hardware manufacturer to install the device and any required drivers.

Locate or install software

The computer includes software that may be

- **Preinstalled on your hard drive.** To see a list of the ready-to-use software preinstalled on your computer:
  1. Click **Start > All Programs**.
  2. Double-click the program you want to open.
- **Provided on a CD or DVD.** To install a software program from a disc:

To install software from a disc on this computer, the computer must be connected to an optional external MultiBay device with an optical drive.

  1. Insert the disc into the optical drive on the optional external MultiBay device.
  2. When the installation wizard opens, follow the on-screen instructions.
  3. Restart the computer if prompted to do so.
- **Preloaded software.** This is software provided on the hard drive, but not ready to use. To locate or install preloaded software or drivers:
  1. Select **Start > All Programs > Software Setup**.
  2. Follow the on-screen instructions and select the check box next to the software program or driver you want to install.

For details about using software included with the computer, refer to the software manufacturer's instructions, which may be provided on disc, as online Help files, or on the manufacturer's Web site.

Protect the computer

The information in this section is designed to protect the computer from damage caused by a virus, a security breach, a power surge, or unsafe operation.

Protect the computer from viruses

When you use the computer for e-mail, network, or Internet access, you expose it to computer viruses that can disable the operating system, applications, or utilities or cause them to function abnormally.

Antivirus software can detect most viruses, destroy them, and in most cases, repair any damage they have caused. To provide ongoing protection against newly discovered viruses, antivirus software must be kept up to date.

Norton Internet Security software is preinstalled on the computer (select models only). For information about using and updating your Norton Internet Security software, click **Start > All Programs > Norton Internet Security > Help and Support**.

For more information about computer viruses, type viruses in the Search field in the Help and Support Center.

Protect your system files

The HP Backup and Recovery Manager provides several ways to back up the system and to recover optimal system functionality. Refer to Appendix C, “Backup and recovery,” for additional information.

Protect your privacy

When you use the computer for e-mail, network, or Internet access, it is possible for unauthorized persons to obtain information about you, your computer, and your data.

To optimize the privacy protection features included with the computer

- Keep the operating system and software updated. Many software applications contain security enhancements.
- Use a firewall. A firewall is software that monitors incoming traffic on the computer. Some firewalls also monitor outgoing traffic.

Protect the computer from power surges

To protect the computer from the power surges that might be caused by an uncertain power supply or an electrical storm:

- Plug the computer power cord into an optional, high-quality surge protector. Surge protectors are available from most computer or electronics retailers.
- During an electrical storm, either run the computer on battery power or shut down the computer and unplug the power cord.
- If applicable to your location, provide surge protection on the modem cable that connects the modem to a telephone line. Telephone line surge protectors are available from computer or electronic retailers in some regions.

Use the computer safely

WARNING: To reduce the risk of electric shock or damage to your equipment:

- Plug the power cord into an AC outlet that is easily accessible at all times.
- Disconnect power from the computer by unplugging the power cord from the AC outlet (not by unplugging the power cord from the computer).
- If provided with a 3-pin attachment plug on your power cord, plug the cord into a grounded (earthed) 3-pin outlet. Do not disable the power cord grounding pin, for example, by using a 2-pin adapter. The grounding pin is an important safety feature.

WARNING: To reduce the risk of serious injury, read the *Safety and Comfort Guide*. It describes proper workstation setup, and proper posture, health, and work habits for computer users. The *Safety and Comfort Guide* also provides important electrical and mechanical safety information. This guide is available on the Web at http://www.hp.com/ergo and in the Help and Support Center. To access the Help and Support Center, select **Start > Help and Support > User Guides**.

WARNING: To avoid potential discomfort or burns, do not block the air vents or use the computer on your lap for extended periods. The computer is designed to run demanding applications at full power. As a result of increased power consumption, it is normal for the computer to feel warm or hot when used continuously. The computer complies with the user-accessible surface temperature limits defined by the International Standard for Safety of Information Technology Equipment (IEC 60950).

WARNING: To reduce potential safety issues, only the AC adapter or battery pack provided with the computer, a replacement AC adapter or battery pack provided by HP, or a compatible AC adapter or battery pack purchased as an accessory from HP should be used with the computer.

For more safety and regulatory information and for battery disposal information, refer to *Regulatory, Safety and Environmental Notices* located in the Help and Support Center. To access the Help and Support Center, select **Start > Help and Support > User Guides**.

Connect to a computer network

The computer may have one or more of the following networking capabilities:

- Local area network (LAN)
- Wireless local area network (WLAN)
- Bluetooth®
- Internal modem

If you plan to connect the computer to a home office LAN or WLAN, refer to the Help and Support Center for information on networking.

If you need assistance to connect to a company LAN or WLAN, contact your network administrator.

If the computer has a Bluetooth device, you can create a personal area network (PAN) to connect to other Bluetooth-enabled devices, such as computers, telephones, printers, headsets, speakers, and cameras. For information on using a Bluetooth device, refer to the *Bluetooth Getting Started* guide in the Help and Support Center.

For information on connecting the computer to the Internet when you are not connected to a network, refer to Appendix B, "Connect to the Internet from your home."

Update your software

Most software, including the operating system, is updated frequently by the manufacturer or provider. Important updates to the software included with the computer might have been released since the computer left the factory.

Some updates may affect the way the computer responds to optional software or external devices. Many updates provide security enhancements.

Update the operating system and other software provided on the computer as soon as the computer is connected to the Internet.

To access update links for the operating system and other software provided on the computer:

» Select **Start > Help and Support**.

Locate the user guides

User guides, regulatory and safety notices, and other resources that provide information about using the computer are available through the Help and Support Center (select **Start > Help and Support > User Guides)** or on a *User Guides* disc included with some models.

For more information about resources and support, refer to Chapter 3, “Troubleshooting.”

Turn off the computer correctly

Whenever possible, turn off the computer by using the standard shutdown procedure:

1. Save your work and close all open applications.
2. Shut down the computer through the operating system by selecting **Start > Turn Off Computer > Turn Off**.

   ✎ If you have been registered to a network domain, the button you click will be called Shut Down instead of Turn Off Computer.

If you are unable to turn off the computer with these procedures, try the following emergency procedures in the sequence provided:

⚠ **CAUTION:** Emergency shutdown procedures result in the loss of unsaved information.

1. Press **ctrl+alt+delete**. Then select **Shut Down > Turn Off**.
2. Slide the power switch toward the front of the computer and hold it for at least 5 seconds.
3. Disconnect the computer from external power and remove the battery pack.

3

Troubleshooting

Troubleshooting resources

If you experience computer problems, follow the troubleshooting steps below:

1. Refer to "Quick troubleshooting," next in this chapter.
2. Access additional information about the computer and Web site links through the Help and Support Center. Select **Start > Help and Support**.

   ✎ Although many checkup and repair tools require an Internet connection, other tools can help you fix a problem when the computer is offline.

3. Contact Customer Care for any further assistance.

Quick troubleshooting

The computer is unable to start up

To turn on the computer, slide the power switch toward the front of the computer. When the computer is turned on, the power light is turned on.

If the computer and the power light are not turned on when you slide the power switch on, adequate power may not be available to the computer.

The suggestions below may help you determine why the computer will not start up:

- If the computer is plugged into an AC outlet, verify that the AC outlet is providing adequate power by plugging another electrical device into the outlet.
- If the computer is running on battery power or is plugged into an external power source other than an AC outlet, plug the computer into an AC outlet using the AC adapter. Be sure the power cord and AC adapter connections are secure.
- If the computer is running on battery power:
  - Remove the primary battery pack and optional accessory battery pack (if applicable) and plug the computer into an AC outlet using the AC adapter. If you can turn the computer on, one of the battery packs may need to be replaced.
  - If the battery light on the front of the computer is blinking, the battery pack has reached a low-battery condition, which may not allow the computer to start up. Plug the computer to an AC outlet using the AC adapter to start the computer and allow the battery to charge.

The computer screen is blank

If the computer is on but the screen is blank, the computer may be in standby or hibernation, may not be set to display the image on the computer screen, or the display switch may not be functioning properly.

Try the suggestions below to resolve the issue:

- To resume from standby or restore from hibernation, briefly slide the power switch toward the front of the computer.

  Standby and hibernation are energy-saving features that can turn off the display. Standby and hibernation can be initiated by the system while the computer is on but not in use, or when the computer has reached a low-battery condition. To change these and other power settings, select **Start > Control Panel > Performance and Maintenance > Power Options**.

- To transfer the image to the computer screen, press **fn+f4**.

  On most models, when an optional external display device, such as a monitor, is connected to the computer, the image can be displayed on the computer screen or the external display, or on both devices simultaneously. When you press **fn+f4** repeatedly, the image alternates among the computer display, one or more external display devices, and simultaneously displays on all devices.

- If the computer has an ambient light sensor (select models only), make sure that the sensor is not obstructed.

  The ambient light sensor is located on the upper-right of the display panel.

Software is functioning abnormally

If the software becomes unresponsive or responds abnormally:

■ Restart the computer:

- ❑ In Microsoft® Windows® XP Home, select **Start > Turn Off Computer > Restart**.
- ❑ In Windows XP Professional, select **Start > Turn Off Computer > Restart > OK**. (If you have been registered to a network domain, the button you click will be called Shut Down instead of Turn Off Computer.)

If you cannot restart the computer using these procedures, refer to the next section, "The computer is turned on but not responding."

■ Run a virus scan. For information about using the antivirus resources on the computer, refer to "Protect the computer from viruses" in Chapter 2, "Next steps."

The computer is turned on but not responding

If the computer is turned on, but not responding to software or keyboard commands, turn off the computer by using the standard shutdown procedure:

1. Save your work and close all open applications.
2. Shut down the computer through the operating system by selecting **Start > Turn Off Computer > Turn Off**.

   ✎ If you have been registered to a network domain, the button you click will be called Shut Down instead of Turn Off Computer.

If you are unable to shut down the computer with these procedures, try the following emergency procedures in the sequence provided:

CAUTION: Emergency shutdown procedures result in the loss of unsaved information.

1. Press **ctrl+alt+delete**. Then select **Shut Down > Turn Off**.
2. Slide the power switch toward the front of the computer and hold it for at least 5 seconds.
3. Disconnect the computer from external power and remove the battery pack.

The computer is unusually warm

It is normal for the computer to feel warm to the touch while it is in use. But if the computer feels *unusually* warm, it may be overheating because a vent is blocked.

If you suspect that the computer is overheating, allow the computer to cool to room temperature. Then be sure to keep all vents free from obstructions while you are using the computer.

CAUTION: To prevent overheating, do not obstruct vents. Use the computer only on a hard, flat surface. Do not allow another hard surface, such as a printer, or a soft surface, such as a pillow, thick rug, or clothing, to block airflow.

The fan in the computer starts up automatically to cool internal components and prevent overheating. It is normal for the internal fan to cycle on and off during routine operation.

An external device is not working

If an external device does not function as expected:

- Turn on the device as instructed in the device documentation. Some devices may not be powered by the computer, and must be turned on before the computer is turned on.
- Be sure that
  - ❑ All device connections are secure.
  - ❑ The device is receiving electrical power.
  - ❑ The device, especially if it is an older one, is compatible with your operating system. For compatibility information, refer to the device manufacturer's Web site.
  - ❑ The correct drivers are installed and updated. Drivers may be available on a CD included with the device or on the device manufacturer's Web site. For more information about updating drivers, select **Start > Help and Support**.

The home wireless network connection is not working

If a home wireless network connection is not working as expected:

- Be sure that the wireless light on the computer is on. If the light is off, press the wireless button to turn it on.
- Be sure that the computer wireless antennae are free from obstructions.
- Be sure that the cable or DSL modem and its power cord are properly connected, and the lights are on.

- Be sure that the wireless router (access point) is properly connected to its power adapter and the cable modem, and the lights are on.
- Disconnect and then reconnect all cables, and turn the power off and then back on.

For information on setting up a home wireless network connection, refer to http://www.hp.com/go/techcenter/wireless (English only).

Help and Support Center

If the preceding questions and solutions did not address your problem, access the Help and Support Center by selecting **Start > Help and Support**. In addition to providing information about your operating system, the Help and Support Center provides

- Information about the computer, such as model and serial number, installed software, hardware components, and specifications.
- Answers to questions about using the computer.
- Product information to help you learn to use computer and operating system features.
- Updates for your operating system, device drivers, and the software provided on the computer.
- Checkups for computer functionality.
- Automated and interactive troubleshooting, repair solutions, and system recovery procedures.
- Links to community forums of IT experts.

Customer Care

If you are unable to find the help you need by using the Help and Support Center, you may need to contact Customer Care.

Prepare to contact Customer Care

For the fastest possible resolution of your problem, have the computer and the following information available when you call or e-mail:

- Product name located on the display or keyboard.
- Serial number (s/n) listed on the service tag.
  - The service tag label is on the bottom of the computer.
  - To display the service tag information on the computer screen, select **Start > Help and Support > My HP Computer**.
- Date the computer was purchased.
- Conditions under which the problem occurred.
- Error messages that have been displayed.
- The manufacturer and model of a printer or other accessories connected to the computer.
- Operating system version number and registration number.

  To display the operating system version number and registration number, select **Start > Help and Support > My HP Computer**. (On some models, the registration number may be identified in the Operating System table as the *Product Id*.)

Contact Customer Care by e-mail or telephone

If the computer is connected to the Internet, select **Start > Help and Support** to get help by e-mail or to access the Customer Care telephone numbers.

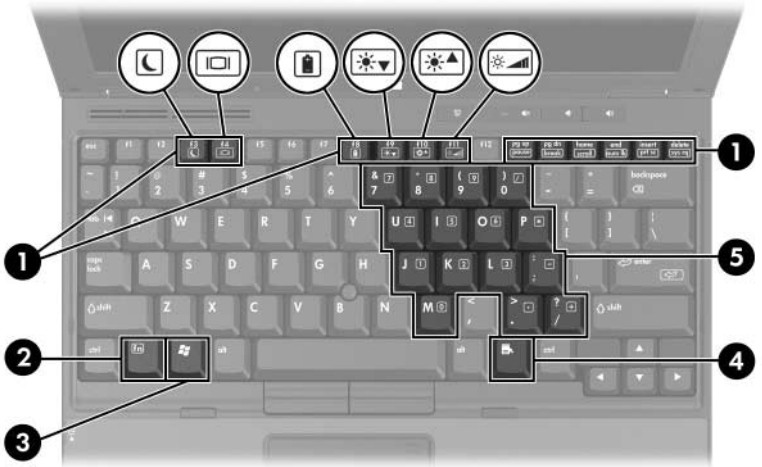
A Notebook Tour

Components included with the computer may vary by region and by model. The illustrations in this appendix identify the standard features included on most computer models.

Top components

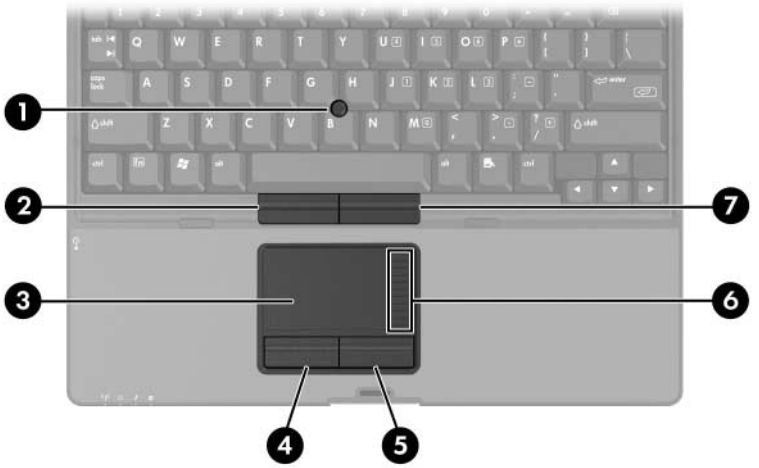
Components			
❶	Caps lock light	❺	Volume down button
❷	Presentation button	❻	Volume up button
❸	Volume mute light	❼	Num lock light
❹	Volume mute button		

Keys



Components			
❶	Function keys (6)	❹	Windows application key
❷	**fn** key	❺	Embedded numeric keypad keys (15)
❸	Microsoft® Windows® logo key		

Pointing devices

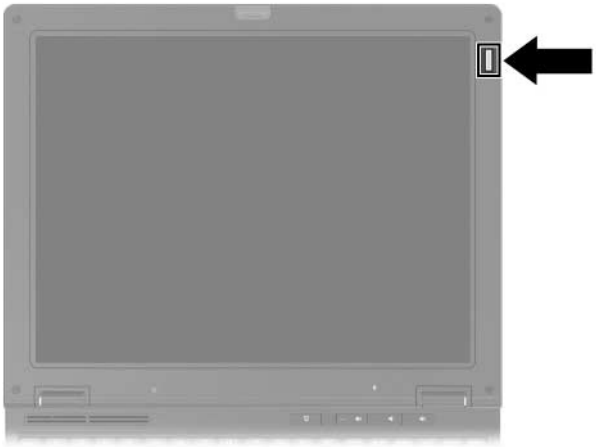


Component			
❶	Pointing stick	❺	Right TouchPad button
❷	Left pointing stick button	❻	TouchPad scroll zone
❸	TouchPad	❼	Right pointing stick button
❹	Left TouchPad button		

Fingerprint reader

The fingerprint reader allows you to log on to Windows using a fingerprint registered in ProtectTools Security Manager, instead of using a Windows password.

The location of the fingerprint reader varies by model.



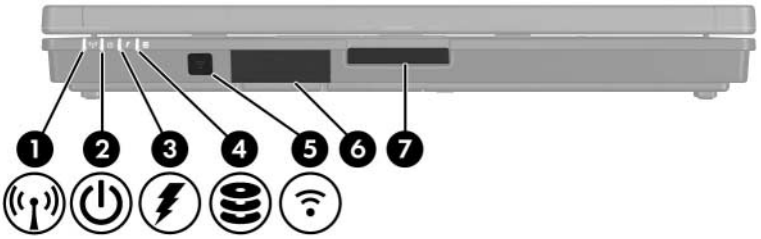
Wireless antennae

Two wireless antennae send and receive wireless device signals. These antennae are not visible from the outside of the computer.

For wireless regulatory notices pertaining to your region, refer to the *Regulatory, Safety and Environmental Notices* located in the Help and Support Center.

For optimal transmission, keep the areas immediately around the antennae free from obstructions.

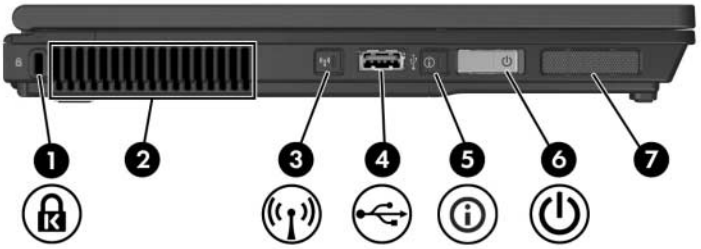
Front components



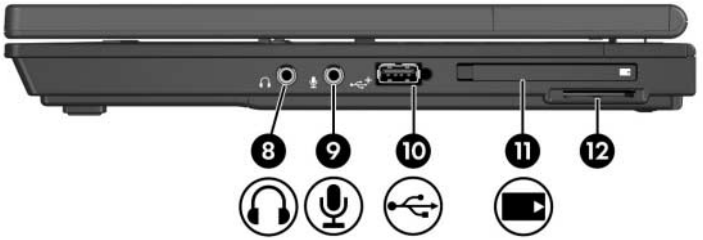
Rear components

Components			
❶	Wireless light	❽	USB port
❷	Power/standby light	❾	RJ-11 (modem) jack
❸	Battery light	❿	RJ-45 (network) jack
❹	Drive light	⓫	Power connector
❺	Infrared port	⓬	External monitor port
❻	Bluetooth® module (select models only)	⓭	S-Video-out jack
❼	Display release button		

Left-side components



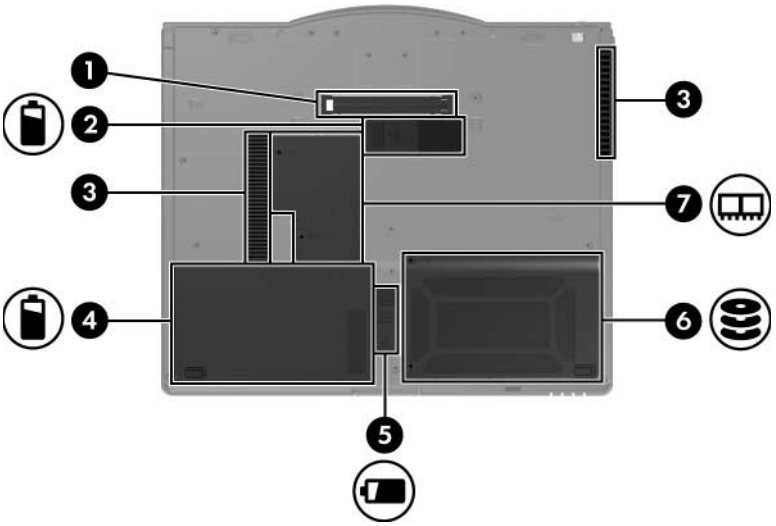
Right-side components



Components			
1	Security cable slot	7	Speaker
2	Vent*	8	Audio-out (headphone) jack
3	Wireless button (select models only)	9	Audio-in (microphone) jack
4	USB port	10	Powered USB port
5	Info Center button	11	PC Card slot or optional smart card reader
6	Power switch	12	Digital Media Slot

*Depending on computer model, vents vary in number and location.

Bottom components



Components			
❶	Docking connector	❺	Primary battery pack release latch
❷	Accessory battery connector	❻	Hard drive bay
❸	Vents (2)	❼	Expansion memory module compartment
❹	Primary battery bay		

B

Connect to the Internet from your home

The computer includes hardware and software that allows you to connect to the Internet. Before you can access the Internet, you must

- Choose an Internet service provider (ISP).
- Choose the type of Internet connection you want, such as broadband, wireless, or dial-up, and connect the hardware.

Internet hardware and software features vary depending on the computer model and your location.

Choose an ISP

You must set up Internet service before you can connect to the Internet. The New Connection Wizard helps you set up a new Internet account or configure the computer to use an existing account.

Use the New Connection Wizard

You can use the New Connection Wizard to connect to the Internet

- If you already have an account with an ISP.
- If you have a disc from an ISP.
- If you do not have an Internet account and would like to select an ISP from the list provided within the wizard.
- If you have selected an unlisted ISP and the ISP has provided you with such information as a specific IP address, POP3 and SMTP settings.

To access the New Connection Wizard and instructions for using the wizard:

» Select **Start > Help and Support**.

If you are prompted within the wizard to choose between enabling or disabling Windows Firewall, choose to enable the firewall.

Choose the type of Internet connection

There are 3 basic types of Internet connection:

- **Broadband:** High-speed Internet access is available through:
  - Cable modem
  - Digital Subscriber Line (DSL)
  - Satellite
  - Other services

  For broadband access, additional hardware and/or software must be provided by your ISP.
- **Wireless:** For high-speed mobile Internet access, you can use a wireless connection. A wireless network set up at home requires a wireless router, purchased separately. To learn about setting up wireless access, visit http://www.hp.com/go/wireless (English only).
- **Dial-up:** You can access the Internet by dialing into a service provider using a modem cable connected to an RJ-11 (modem) jack.

C
Backup and recovery

The HP Backup and Recovery Manager provides several ways to back up the system and to recover optimal system functionality.

HP installed drivers, utilities, and applications can be copied to a CD or to a DVD using the HP Backup and Recovery Manager.

To copy software to a disc on this computer, the computer must be connected to an optional external MultiBay device with an optical drive.

Safeguard your data

Software or devices added to the computer can cause your system to become unstable. To safeguard your documents, store personal files in the My Documents folder and periodically create a backup copy of the folder.

Back up the system

Using HP Backup and Recovery Manager, you can

- Back up specific files and folders.
- Back up the entire system.
- Back up modifications since your last backup, using HP system recovery points.
- Schedule backups.

Back up specific files or folders

You can back up specific files or folders to the hard drive, to an optional external hard drive, or to discs.

To back up specific files or folders:

1. Select **Start > All Programs > HP Backup & Recovery Manager > HP Backup and Recovery Manager**.

   The HP Backup and Recovery Manager opens.

2. Click **Next**.
3. Click **Backup to protect system settings and important data files**, and then click **Next.**
4. Click **Backup individual files and folders**, and then click **Next**.

   The Backup Wizard opens.

5. Click **Backup selected files from most common locations (Recommended)**.

   – or –

   Click **Advanced Backup (Experienced users)** to access advanced filtering techniques.

6. Click **Next**.
7. Follow the on-screen instructions to back up specific files or folders.

   This process may take several minutes depending on the file size and speed of the computer.

   ✎ If you are backing up your information onto a disc, you will be prompted to insert a blank disc into the optical drive.

Back up the entire system

When you perform a complete system backup, you are saving the full factory image, including the Windows operating system, software applications, and all personal files and folders.

✎ A copy of the entire hard drive image can be stored on another hard drive, on a network drive, or on recovery discs that you create.

To back up the entire system:

1. Select **Start > All Programs > HP Backup & Recovery Manager > HP Backup and Recovery Manager**.

   The HP Backup and Recovery Manager opens.

2. Click **Next**.

3. Click **Backup to protect system settings and important data files**, and then click **Next**.
4. Click **Backup entire hard drive**, and then click **Next**.

   The Entire Drive Backup Manager opens.
5. Click **Next**.
6. Select where you want to back up your entire drive.

   You can back up to one of the following locations:

   ❑ On my PC: This option backs up your information to the computer hard drive.

   ❑ On another drive: This option backs up your information to an optional external hard drive.

   ❑ On a network: This option backs up your information to a mapped network drive.
7. Select the **Protect data access with password** check box, and type your password in the **Password** box.

   ✎ This step is optional. If you do not want to password protect your data access, clear the Protect data access with password check box.
8. Click **Next** to back up your entire hard drive.

   ✎ This process may take over an hour, depending on the computer speed and the amount of information being stored.

Back up modifications made to the system

When you back up modifications made to the system, you are creating system recovery points. A system recovery point allows you to save and name a snapshot of your hard drive at a specific point in time. You can then recover back to that point if you want to reverse subsequent changes made to your system.

By default, the first system recovery point, a snapshot of the entire image, is automatically created the first time you perform a backup. Subsequent recovery points make a copy of changes made after that time.

HP recommends that you create recovery points

- Before you add or extensively modify software or hardware.
- Periodically, whenever the system is performing optimally.

Recovering to an earlier recovery point does not affect data files or e-mails created since that last recovery point.

After you create a recovery point, you are prompted to schedule subsequent recovery points. You can schedule recovery points for a specific time or event in your system.

To create and schedule a system recovery point:

1. Select **Start > All Programs > HP Backup & Recovery Manager > HP Backup and Recovery Manager**.

   The HP Backup and Recovery Manager opens.

2. Click **Expert Mode**.
3. Click **Create or manage recovery points**, and then click **Next**.

   The Recovery Point Manager opens.

4. Follow the on-screen instructions to create or manage recovery points.

Schedule backups

To schedule backups:

1. Select **Start > All Programs > HP Backup & Recovery Manager > HP Backup and Recovery Manager**.

   The Backup and Recovery Manager opens.

2. Click **Expert Mode**.
3. Click **Schedule Backups**.
4. Click **Next**.

   The Backup Scheduler opens.

5. Click **Next**.
6. Schedule recovery points at specific intervals (daily, weekly) or at specific events, such as at system start or when you dock to a docking station. Click **Next** to further define the settings.

   A summary of your recovery point settings is displayed.

7. Click **Next** to finalize these settings.
8. Click **Finish** to exit.

Recover the system

HP Backup and Recovery Manager analyzes the hard drive and creates a dedicated hard drive recovery partition on the hard drive large enough to store a copy of the full factory image. You choose whether you want to store that copy on the recovery partition, on another drive, or on external recovery discs.

✎ Before using HP Backup and Recovery Manager, try repairing the system by running Microsoft Windows System Restore. For more information, select **Start > Help and Support**, and then search for "System Restore."

The HP Backup and Recovery Manager allows you to

- **Create recovery discs (recommended).** The recovery discs are used to boot the computer and to restore the full factory image (operating system and software) in case of system failure or instability.

  ✎ To create recovery discs or boot this computer using recovery discs, the computer must be connected to an optional external MultiBay device with an optical drive.

  ✎ If you don't have a CD or DVD burner, a copy of the entire hard drive image can be stored on another hard drive or on a network drive.

- **Perform a recovery.** You can perform a full system recovery or recover important files from a recovery partition on the hard drive or from recovery discs that you create.

Create recovery discs (recommended)

After setting up the computer for the first time, you can create a set of recovery discs of your full factory image using HP Backup and Recovery Manager. The recovery discs are used to start up (boot) the computer and restore the operating system and software programs to factory settings in case of system failure or instability.

CAUTION: After you create the recovery discs, you can increase the amount of space on the hard drive by deleting the recovery partition. However, doing this is **not** recommended. If you delete this partition, you will lose any information that is on the partition.

Only one set of recovery discs can be created for this computer.

Before creating recovery discs:

- Connect the computer to an optional external MultiBay device with an optical drive.
- Use high-quality CD-R, DVD-R, or DVD+R media. (purchase separately)

  DVD±RW/R and double-layer DVD±RW are not compatible with the HP Backup and Recovery Manager software.

- Number each disc before inserting it into the external MultiBay device optical drive.
- If necessary, you can exit the program before you have finished creating the recovery discs. The next time you open the program, you will be prompted to continue the disc creation process where you left off.

To create a set of recovery discs:

1. Select **Start > All Programs > HP Backup & Recovery Manager > HP Backup and Recovery Manager**.

   The HP Backup and Recovery Manager opens.

2. Click **Next**.
3. Click **Create recovery CDs and DVDs to recover the system (recommended)**.
4. Click **Next.**

   The Recovery Media Creator Wizard opens.

5. Click **Next**.
6. Click **Write to CD/DVD**, and then click **Next**.
7. Click **Factory image recovery discs**, and then click **Next**.

   ✎ If you are operating the computer on battery power, you will be prompted to connect to AC power before you can go to the next step.

8. Select the type of discs you want to use, and then click **Next**.

   ✎ The software examines the image and displays the number of blank discs needed to create your recovery discs.

9. Insert the first disc and follow the on-screen instructions to complete the creation of the recovery discs.

Perform a recovery

Performing a recovery from the recovery discs

To perform a recovery from the recovery discs:

1. Back up all personal files.
2. Insert the first recovery disc into the optional external MultiBay device optical drive and restart the computer.
3. Follow the on-screen instructions.

Performing a recovery from the hard drive

Start the full system recovery from either the Start button or **f11**.

1. From the **Start** menu:
   a. Select **Start > All Programs > HP Backup & Recovery Manager > HP Backup and Recovery Manager**.

      The HP Backup and Recovery Manager opens.

   b. Click **Expert Mode**.
   c. Click **Start PC Recovery**, and then click **Next**.
   d. Click **Next** again to restart the computer.

      PC Recovery opens.

   e. Continue to step 2 to complete the recovery process.

   – or –

From **f11**:

a. Restart the computer.

b. Press **f11** while the "Press <F11> for recovery" message is displayed on the screen.

c. Continue to step 2 to complete the recovery process.

2. Choose one of the following options:

❑ **Recover PC to a specific point in time:** Allows you to recover from a previous recovery point.

❑ **Recover PC's original factory installation and backup data:** Backs up your information and then performs a full system recovery.

❑ **Recover PC's factory installation:** Formats the hard drive and performs a full system recovery.

This option does *not* perform a backup; your information will be erased.

❑ **Back up files:** Allows you to back up your files on the hard drive.

3. Click **Next**.

The system prepares your hard drive and begins the recovery process.

4. Follow the on-screen instructions to complete the recovery.

D

Specifications

The following sections provide information on the operating environment specifications and power specifications.

Operating environment

The operating environment information in the following table might be helpful if you plan to use or transport your computer in extreme environments.

Factor	Metric	U.S.
Temperature		
Operating (not writing to optical disc)	0°C to 35°C	32°F to 95°F
Operating (writing to optical disc)	5°C to 35°C	41°F to 95°F
Nonoperating	-20°C to 60°C	-4°F to 140°F
Relative humidity (noncondensing)		
Operating	10% to 90%	10% to 90%
Nonoperating	5% to 95%	5% to 95%
Maximum altitude (unpressurized)		
Operating (14.7 to 10.1 psia)	-15 m to 3,048 m	-50 ft to 10,000 ft
Nonoperating (14.7 to 4.4 psia)	-15 m to 12,192 m	-50 ft to 40,000 ft
*Pounds per square inch absolute (psia) is another unit of measurement for altitude.		

Rated input power

The power information in this section may be helpful if you plan to travel internationally with your computer.

The computer operates on DC power, which can be supplied by battery or an an AC-to-DC adapter. Although the computer can be powered from a standalone DC power source, it should be powered only with an AC adapter or a DC power source supplied and approved by HP for use with this computer.

The computer is capable of accepting DC power within the following specifications:

Input power	Rating
Operating voltage	18.5 V dc @ 3.5 A - 65 W
Operating current	3.5 A

This product is designed for IT power systems in Norway with phase-to-phase voltage not exceeding 240 V rms.

Index

A

AC adapter
  connecting 1–5
  identifying 1–2
accessory battery connector A–9
altitude specifications D–1
antennae, wireless A–6
antivirus software 2–3
audio-in (microphone) jack A–8
audio-out (headphone) jack A–8

B

backup and recovery
  recovery discs 1–9
battery bay, primary A–9
battery connector, accessory A–9
battery light 1–6, A–7
battery pack 1–2
  charging 1–6
  inserting 1–4
battery pack release latch, primary A–9
Bluetooth module A–7
bottom components 1–3, A–9
buttons
  display release A–7
  Info Center A–8
  left pointing stick A–4
  left TouchPad A–4
  mute A–2
  presentation A–2
  right pointing stick A–4
  right TouchPad A–4
  volume A–2
  wireless A–8

C

cables, modem 2–4
caps lock light A–2
CDs, ISP B–2
components
  bottom 1–3, A–9
  front A–7
  keys A–3
  left-side A–8
  pointing devices A–4
  rear A–7
  right-side A–8
  top A–2

computer
turning off 2–8
turning on 1–6
connect to a computer network 2–6
connect to the Internet B–1
connecting the computer 1–5
connectors
docking A–9
power A–7
cord, power, surge protection 2–4
customer support 3–7, 3–8

D

devices, external
drivers 3–6
troubleshooting 3–6
diagnostic features 3–7
Digital Media Slot A–8
display release button 1–6, A–7
docking connector A–9
drive light A–7
drivers, obtaining 3–6

E

electrical storm, safety issues 2–4
embedded numeric keypad A–3
emergency shutdown procedures 2–8
environmental specifications D–1
external devices
drivers 3–6
troubleshooting 3–6
external monitor port A–7

F

fingerprint reader A–5
firewall, using 2–4
first-time setup 1–1
fn key A–3
function keys A–3

H

hard drive bay A–9
headphone jack A–8
Help and Support Center 3–7
hibernation 1–3, 3–3
HP Smart AC Adapter 1–2
humidity specifications D–1

I

IEC 60950 compliance 2–5
Info Center button A–8
infrared port A–7
installing software 2–2
Internet Connection Firewall 2–4

J

jacks
audio-in (microphone) A–8
audio-out (headphone) A–8
RJ-11 (modem) A–7
RJ-45 (network) A–7
S-Video-out A–7

K

keys
- embedded numeric keypad A–3
- **fn** A–3
- function A–3
- Windows application A–3
- Windows logo A–3

L

labels, service tag 3–8
language settings, software setup 1–8
left pointing stick button A–4
left TouchPad button A–4
left-side components A–8
lights
- battery 1–6, A–7
- caps lock A–2
- drive A–7
- num lock A–2
- power/standby 1–7, A–7
- volume mute A–2
- wireless A–7

M

memory module compartment A–9
microphone jack A–8
Microsoft Windows logo A–3
model number 3–7
modem (RJ-11) jack A–7
modem cable 1–2
modem, virus protection 2–3
monitor, external 3–6
mute button A–2

N

network (RJ-45) jack A–7
Norton Internet Security 2–3
num lock light A–2

O

opening the computer 1–6
operating environment specifications D–1
operating system
- displaying version number 3–8
- finding tours and tutorials 3–7
- Help and Support Center 3–7
- updating 2–4

Operating System disc C–1
overheating 2–5, 3–5

P

PC Card slot A–8
pointing stick A–4
ports
- external monitor A–7
- infrared A–7
- USB A–7, A–8

power
- connecting the computer to external 1–5
- surge protection 2–4
- turning off 2–8

power connector A–7
power cord
- securing 3–2
- surge protection 2–4

power problems, troubleshooting 3–2
power switch A–8
  light 1–7
  turning off 2–8, 3–5
  turning on 1–7
power/standby light 1–7, A–7
presentation button A–2
printer 3–6
privacy protection features 2–4
Product Id 3–8
product number 3–8

Q

quick troubleshooting 3–2

R

rated input power specifications D–2
reader, fingerprint A–5
rear components A–7
recovery, system C–1
registration, displaying operating system registration number 3–8
regulatory information notices 2–6
right pointing stick button A–4
right-side components A–8
RJ-11 (modem) jack A–7
RJ-45 (network) jack A–7

S

safeguarding data C–1
Safety and Comfort Guide 2–5
security cable slot A–8
serial number 3–7, 3–8
service tag 3–8
shutting down 2–8
slots
  Digital Media A–8
  PC Card A–8
software
  firewall 2–4
  Help and Support Center 3–7
  Norton Internet Security 2–3
  setting up 1–8
  updating 2–7
speaker A–8
specifications 3–7
standby 3–3
S-Video-out jack A–7
system recovery C–1

T

technical support 3–7, 3–8
temperature
  safety considerations 2–5
  troubleshooting 3–5
temperature specifications D–1
TouchPad A–4
  left button A–4
  right button A–4
  scroll zone A–4
tours, product information 3–7
traveling with computer, environmental specifications D–1

troubleshooting procedures
external device problems 3–6
hibernation or standby problems 3–3
overheating problems 3–5
software problems 3–4
virus problems 3–4
wireless network problems 3–6
troubleshooting resources, Help and Support Center 3–7
turning off 2–8
turning on 3–2
tutorials, tours 3–7

U

updates, software 2–7
USB port, powered A–8
USB ports A–7, A–8

V

vents 3–5, A–8, A–9
viruses, computer 2–3, 3–4
volume buttons A–2

W

Windows application key A–3
Windows firewall 2–4
Windows logo key A–3
wireless antennae A–6
wireless button A–8
wireless light A–7
WLAN (wireless local area network) 2–6